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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,738	03/04/2005	Jared S Timko	22188/06985	7877

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EXAMINER	
BASTIANELLI, JOHN	
ART UNIT	**PAPER NUMBER**
3753	

MAIL DATE	DELIVERY MODE
06/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,738	TIMKO ET AL.	
	Examiner	Art Unit	
	John Bastianelli	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *38-54,56 and 58-78* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *38-54,56 and 58-78* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/31/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Request for Continued Examination

1. The request filed on April 9, 2007 for a Request for Continued Examination (RCE) is acceptable and an action on the RCE follows.

Claim Objections

2. Claims 65 and 76 have the following informalities: In claim 65, "trunnions" is missing in the middle of the claim. In claim 76 "trunnion" should be --trunnion--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 53-54 and 56 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant's claim language is indefinite as the term "at a temperature below which said packing deforms". The applicant has not defined the temperature at which applicant's packing deforms, so this is indefinite. The examiner has done some research and

some molding is done at or below 100 degrees F therefore injection molding is seen as acceptable for this as applicant has provided.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 49 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has defined the valve element as a ball which is inherently spherical and then in claim 49 cites the valve element is non-spherical which is contradictory to the parent claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 38-40, 49-51, 53-54, 56, 58-59, 63-67, 69-70 and 76-78, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Scaramucci US 3,599,932. Scaramucci disclose a valve 10 having a valve body 12 having a valve cavity therein; a valve element 64a for controlling flow through the valve based on a rotational position of the valve element about an axis, and a single piece packing 110 that surrounds said valve element and seals directly against said valve element within said valve cavity; wherein said valve element comprises a ball 82 and adjacent upper and lower cylindrical trunnions 148 and 152 extending

from the ball; said lower cylindrical trunnion extending axially past a lower end of said packing; said valve cavity being dimensioned to closely receive said valve element. The packing is seen as dimensioned "to be installed on said valve element with a room temperature range" of "about 65-100 degrees F" and this is product by process. The valve element is seen as non-spherical in Fig. 3 and spherical in Fig. 4. The packing is an interference fit with the valve element. The term "when said packing is installed thereon prior to loading said packing within said valve cavity" is product by process. The packing is seen as dimensioned "to be installed on said valve element at a temperature below which said packing deforms" of "about room temperature" and this is product by process. The packing is over molded onto the valve element and this is product by process. The valve element has a ratio D3/D1 that facilitates assembly of the packing onto the valve element at room temperature. Load members 42 apply a load to the packing over a range of temperatures while permitting the valve element to axially shift to compensate for temperature effects on the packing (as long as it is tight enough to touch and loose enough to move). A stem 56 or 130 (Fig. 4) extending from the upper trunnion has a smaller diameter than the upper trunnion. The valve cavity has a reduced diameter counterbore sized to form a clearance fit between the lower trunnion and the counterbore that prevents a lower portion of the packing from extruding into the counter bore. The valve element may axially shift in the valve cavity in two opposite directions to compensate for temperature effects. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product in the prior art, the claim is unpatentable even though the prior product was made by a different process (see MPEP 2113).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 41-46, 71-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaramucci US 3,599,932.

Scaramucci is silent as to the ratios of H/D4 of about .8 and D3/D1 of about .8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the packing wider than taller H/D4 of about .8 in order to make the packing thicker to provide better sealing due to more compressible material around the point of contact of fluid flow and seal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the trunnion almost as wide as the ball D3/D1 of about .8 in order to make machining the valve element easier as less material would need to be removed from the ball part of the valve to the trunnion.

11. Alternatively, claims 41-42, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaramucci US 3,599,932 in view of Schmitt US 4,423,749.

Scaramucci is silent as to the ratio of H/D4 of about .8. Schmitt shows H/D4 in which the packing is slightly wider than it is tall with a ratio of about .8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the packing of Scaramucci wider than taller H/D4 of about .8 as disclosed by Schmitt in order to make the

packing thicker to provide better sealing due to more compressible material around the point of contact of fluid flow and seal.

12. Alternatively, claims 43-44 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaramucci US 3,599,932 in view of Moen US 3,192,943. Scaramucci is silent as to the ratio of D3/D1 of about .8. Moen shows D3/D1 in which the ball is slightly larger than the trunnion with a ratio of about .8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the trunnion of Scaramucci almost as wide as the ball D3/D1 of about .8 as disclosed by Moen in order to make machining the valve element easier as less material would need to be removed from the ball part of the valve to the trunnion.

13. Alternatively, claims 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaramucci US 3,599,932 in view of Schmitt US 4,423,749 in view of Moen US 3,192,943. Scaramucci is silent as to the ratio of H/D4 of about .8. Schmitt shows H/D4 in which the packing is slightly wider than it is tall with a ratio of about .8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the packing of Scaramucci wider than taller H/D4 of about .8 as disclosed by Schmitt in order to make the packing thicker to provide better sealing due to more compressible material around the point of contact of fluid flow and seal. Scaramucci is silent as to the ratio of D3/D1 of about .8. Moen shows D3/D1 in which the ball is slightly larger than the trunnion with a ratio of about .8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the trunnion of Scaramucci almost as wide as the ball D3/D1 of about .8 as

disclosed by Moen in order to make machining the valve element easier as less material would need to be removed from the ball part of the valve to the trunnion.

14. Claims 47-48, 52, 61-62, 68, 73-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaramucci US 3,599,932 in view of Soria Vega US 5,595,206. Scaramucci lacks the packing made of a plastic polymer of PTFE, polyethylene, or PFA. Soria Vega discloses the packing made of PTFE, polyethylene, or PFA. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the packing of Scaramucci out of PTFE, polyethylene or PFA as disclosed by Soria Vega as these materials provide better corrosion resistance and easier turning of the valve.

15. Claims 60 and 75 and alternatively 65, are rejected under 35 U.S.C. 103(a) as being unpatentable over Scaramucci US 3,599,932 in view of Kemp US 4,911,408. Scaramucci lacks the packing being live loaded. Kemp discloses live loading a packing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the packing of Scaramucci live loaded as disclosed by Kemp in order to keep everything tight.

Response to Arguments

16. Applicant's arguments with respect to claims 38-66 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Bastianelli whose telephone number is (571) 272-4921. The examiner can normally be reached on M-Th (8-6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Bastianelli
Primary Examiner
Art Unit 3753

JB
June 20, 2007